

WE CLAIM:

1. A cam mechanism with a decompression device comprising:

a camshaft driven to rotate in conjunction with a crankshaft and including at least one cam having a grooved portion opposite a cam lobe with the camshaft interposed therebetween, the camshaft also including a guide part formed near said one cam having a shaft receiving hole penetrating through the guide part orientated parallel to the camshaft at position facing the grooved portion;

a flange member disposed on the camshaft, facing said one cam with the guide part interposed therebetween;

a decompression cam including a cylindrical shaft part, a decompression cam lobe formed on a circumferential surface side at one end of the shaft part, and a centrifugal weight part extending in a direction orthogonal to an axis of the shaft part at the other end of the shaft part;

wherein the decompression cam is disposed in such a manner that the shaft part of the decompression cam can be inserted into the shaft receiving hole and pivotally supported, the cam lobe of the decompression cam can be inserted into the groove portion, and the centrifugal weight part can be positioned between the guide part and the flange member;

wherein the decompression cam is arranged such that when the camshaft rotates at a given rotational speed or less, the centrifugal weight part is positioned near the camshaft, whereby the decompression cam lobe is protruded outward from the groove portion; and

when the camshaft rotates faster than the given rotational speed, the centrifugal weight part is separated from the camshaft by centrifugal force, and the shaft part is rotated, whereby the decompression cam lobe is positioned inside the groove portion.

2. The cam mechanism with the decompression device according to claim 1 further comprising:

a spring attached portion formed in such a manner that the decompression cam is extended along the axis of the shaft part; and

a return spring wound around the spring attached portion and having elasticity, wherein a latching portion for latching the return spring is formed in the centrifugal weight part, in the vicinity of the shaft part, and

wherein one end of the return spring is latched with the latching portion, the other end is latched onto the camshaft, and the centrifugal weight part is energized toward the camshaft by energizing force of the return spring.

3. A cam mechanism with a decompression device comprising:

a camshaft, and

a decompression cam having a lobe portion with mechanical means for retracting and extending the lobe portion in response to the rotational speed of the camshaft.